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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/815,297	03/23/2001	Jacqueline A. Oldham	39-236	4610

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EXAMINER	
EVANISKO, GEORGE ROBERT	
ART UNIT	PAPER NUMBER
3762	

DATE MAILED: 06/25/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/815,297	Applicant(s) OLDHAM, JACQUELINE A.	
	Examiner George R Evanisko	Art Unit 3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 April 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *11 and 13-15* is/are allowed.

6)☒ Claim(s) *1-10,12 and 16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 12 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Cywinski (5350415). For claims 4-7, for the doublet, Cywinski states in column 5, line 20 that the high rate has an interpulse interval of about 10-20 ms and in line 27 that the pulses last for about 40 ms. Using the about 20 ms pulse interval and about 40 ms pulse train will provide the claimed doublet.

Claims 1-7 and 16 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Campos (5097833).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cywinski. Cywinski discloses the claimed invention but does not disclose expressly the pulses consisting of pulses at 500 ms, 20 ms, and 12 ms (claim 8) or the pulses at the various pulse intervals (claims 9 and 10). It would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the trophic stimulation of muscles as taught by Cywinski with the pulses consisting of pulses at 500 ms, 20 ms, and 12 ms or the pulses at the various pulse intervals, because Applicant has not disclosed that the pulses consisting of pulses at 500 ms, 20 ms, and 12 ms or the pulses at the various pulse intervals provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with trophic stimulation of muscles as taught by Cywinski, because his stimulation pattern mimics the motor unit action potentials that are naturally generated when muscles are innervated and provides for trophic stimulation of muscles.

Therefore, it would have been an obvious matter of design choice to modify Cywinski to obtain the invention as specified in the claim(s).

Claims 8-10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Campos. Campos discloses the claimed invention but does not disclose expressly the pulses consisting of pulses at 500 ms, 20 ms, and 12 ms (claim 8) or the pulses at the various pulse intervals (claims 9 and 10) or the user amplitude adjustment means (claim 12). It would have

been obvious to one having ordinary skill in the art at the time the invention was made to modify the muscle stimulator as taught by Campos, with an user amplitude adjustment means since it was known in the art that muscle stimulators have means for adjusting the amplitude of the stimulation to allow the user to select a comfortable level for the stimulation.

In addition, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the muscle stimulator as taught by Campos with the pulses consisting of pulses at 500 ms, 20 ms, and 12 ms or the pulses at the various pulse intervals, because Applicant has not disclosed that the pulses consisting of pulses at 500 ms, 20 ms, and 12 ms or the pulses at the various pulse intervals provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with multiple frequency stimulation pattern as taught by Campos, because his stimulation pattern provides a high therapeutic effect for muscles with minimal resulting discomfort.

Therefore, it would have been an obvious matter of design choice to modify Campos to obtain the invention as specified in the claim(s).

Allowable Subject Matter

Claims 11 and 13-15 are allowed.

Response to Arguments

Applicant's arguments filed 4/21/03 have been fully considered but they are not persuasive. The argument that neither Cywinski or Campos disclose a series of bursts is not persuasive. Cywinski and Campos disclose a continuous train/series of at least four bursts of pulses. The first two repeating burst of pulses provide the claimed first continuous train of

regularly spaced pulses and the claimed series of regularly spaced second trains of regularly spaced pulses. The claimed second trains of regularly spaced pulses comprising one train of pulses in the first burst and one train of pulses in the second burst. The next two repeating burst of pulses providing the claimed plurality or series of regularly spaced bursts of pulses.

The argument that "the dictionary definition of the term burst includes...violent effort" is not persuasive since another dictionary definition of burst is "a volley of shots" and since Campos and Cywinski meet the applicants dictionary definition of burst and/or the examiners dictionary definition of burst. Campos and Cywinski meet the definition of burst since they both provide a "volley of shots" of electrical pulses. In addition, Campos and Cywinski meet the applicants definition of burst since they both provide electrical pulses that "appear or disappear suddenly", "to make an abrupt beginning", "a sudden intense outbreak" and "a brief, intense or violent effort" since their systems provide no voltage or current to the electrodes and then suddenly apply a brief voltage/current pulse to the electrodes causing stimulation, then again provide no current or voltage to the electrodes.

Finally, the argument that figure 2 shows "spaced apart" bursts of pulses and neither Campos or Cywinski show this is not persuasive since the claims do not contain any limitation to each series of a burst of pulses being "spaced apart". In addition, the claims contain no limitation directed to the burst of pulses having an on time and an off time. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George R Evanisko whose telephone number is 703 308-2612. The examiner can normally be reached on M-F 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 703 308-5181. The fax phone numbers for the organization where this application or proceeding is assigned are 703 306-4520 for regular communications and 703 306-4520 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-1148.

George R Evanisko
Primary Examiner
Art Unit 3762

6/23/3

GRE
June 23, 2003